

## CLAIMS

1. An apparatus for generating electrical power from tidal water movement, the apparatus comprising:-

at least one electrical turbine adapted to be driven by tidal water movement to generate a respective first electrical signal; and

drive means located remotely from the or each said turbine for receiving the or each said first electrical signal, controlling the speed of rotation of the or each said turbine to adjust the efficiency thereof, and outputting at least one second electrical signal to supply electrical power generated by the or each said turbine.

2. An apparatus according to claim 1, further comprising feedback means for providing at least one first control signal for use in controlling the speed of rotation of the or each said turbine by said drive means to adjust the efficiency thereof.

3. An apparatus according to claim 1 or 2, further comprising control means for receiving the or each said second electrical signal and outputting at least one third electrical signal to supply electrical power generated by the or each said turbine, wherein said control means is adapted to control the frequency of the or each said third electrical signal.

4. An apparatus according to claims 2 and 3, wherein said feedback means is adapted to apply at least one said first control signal responsive to the frequency of at least one said third electrical signal.

5. An apparatus according to any one of claims 2 to 4, wherein said feedback means is adapted to apply at least one said control signal, responsive to the velocity of said tidal water movement, to said control means

6. An apparatus according to any one of the preceding claims, further comprising AC/DC converter means for receiving the or each said first electrical signal and outputting DC signals to said drive means in response thereto.

7. An apparatus according to claim 6, further comprising DC/AC converter means for receiving the or each said second electrical signal and outputting said third electrical signals in response thereto.

8. An apparatus according to any one of the preceding claims, wherein said drive means is adapted to control the speed of rotation of at least one said turbine to limit the efficiency thereof.

9. An apparatus according to any one of the preceding claims, wherein said drive means is adapted to cause rotation of at least one said turbine from standstill thereof.

10. An apparatus for generating electrical power from tidal water movement, the apparatus substantially as hereinbefore described with reference to the accompanying drawing.

11. A method of generating electrical power from tidal water movement, the method comprising:-

causing at least one electrical turbine to be driven by tidal water movement to generate a respective first electrical signal;

controlling the speed of rotation of the or each said turbine by means of drive means located remotely from the or each said turbine to control the efficiency thereof; and

outputting at least one second electrical signal from said drive means to supply electrical power generated by the or each said turbine.

12. A method according to claim 11, further comprising the step of controlling the speed of rotation of the or each said turbine in response to the frequency of at least one electrical signal output by said drive means..

13. A method according to claim 11 or 12, further comprising the step of controlling the speed of rotation of the or each said turbine in response to the velocity of said tidal water movement.

14. A method according to any one of claims 11 to 13, further comprising the step of controlling the speed of rotation of at least one said turbine to limit the efficiency thereof.

15. A method according to any one of claims 11 to 14, further comprising the step of using said drive means to cause rotation of at least one said turbine from standstill thereof.

16. A method of generating electrical power from tidal water movement, the method substantially as hereinbefore described with reference to the accompanying drawing.